

SAFETY DATA SHEET

1. Identification

Product identifier 280 SmartScrubber
Other means of identification SS-C5000N (280)
Recommended use Neutral pH Brush Lubricant
Recommended restrictions None known.
Manufacturer/Importer/Supplier/Distributor information
Manufacturer
Company name Smart Solutions
Address 12 Corporate Plaza Dr Suite 150
 Newport Beach, Ca 92660
Telephone 949-722-4500
E-mail Not available.
Emergency phone number 800-424-9300 CHEMTREC

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Serious eye damage/eye irritation Category 2
 Reproductive toxicity Category 1A
Environmental hazards Not classified.
OSHA defined hazards Not classified.
Label elements



Signal word Danger
Hazard statement Causes serious eye irritation. May damage fertility or the unborn child.
Precautionary statement
Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response If swallowed: Rinse mouth. Do NOT induce vomiting. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.
Storage Store locked up. Store away from direct sunlight or ultraviolet light. Keep container tightly closed when not in use. Store in a dry place. Protect from atmospheric moisture.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC) None known.
Supplemental information 39.1% of the mixture consists of component(s) of unknown acute oral toxicity. 39.1% of the mixture consists of component(s) of unknown acute dermal toxicity. 98.25% of the mixture consists of component(s) of unknown acute inhalation toxicity.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
SULFONIC ACIDS, C14-16-ALKANE HYDROXY AND C14-16-ALKENE, SODIUM SALTS		68439-57-6	27.972

Chemical name	Common name and synonyms	CAS number	%
BENZENESULFONIC ACID, DIMETHYL-, SODIUM SALT (1:1)		1300-72-7	7.108
BENZENE, METHYL-		108-88-3	0.1454
BENZENE		71-43-2	0.0182
BENZENE, (1-METHYLETHYL)-		98-82-8	0.0002
BENZENE, ETHYL-		100-41-4	0.0002
Other components below reportable levels			64.756

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
BENZENE (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)	PEL	245 mg/m3
BENZENE, ETHYL- (CAS 100-41-4)		50 ppm
	PEL	435 mg/m3
		100 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
BENZENE (CAS 71-43-2)	Ceiling	25 ppm
	TWA	10 ppm
BENZENE, METHYL- (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
BENZENE (CAS 71-43-2)	STEL	2.5 ppm
	TWA	0.5 ppm
BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)	TWA	50 ppm
BENZENE, ETHYL- (CAS 100-41-4)	TWA	20 ppm
BENZENE, METHYL- (CAS 108-88-3)	TWA	20 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
BENZENE (CAS 71-43-2)	STEL	1 ppm
	TWA	0.1 ppm
BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)	TWA	245 mg/m3
		50 ppm
BENZENE, ETHYL- (CAS 100-41-4)	STEL	545 mg/m3
		125 ppm
	TWA	435 mg/m3
BENZENE, METHYL- (CAS 108-88-3)		100 ppm
	STEL	560 mg/m3
	TWA	150 ppm
		375 mg/m3

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
BENZENE (CAS 71-43-2)	25 µg/g	S-Phenylmercapturic acid	Creatinine in urine	*
BENZENE, ETHYL- (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
BENZENE, METHYL- (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

BENZENE (CAS 71-43-2)	Can be absorbed through the skin.
BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)	Can be absorbed through the skin.
BENZENE, METHYL- (CAS 108-88-3)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)	Skin designation applies.
BENZENE, METHYL- (CAS 108-88-3)	Skin designation applies.

US - Tennessee OELs: Skin designation

BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)	Can be absorbed through the skin.
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US ACGIH Threshold Limit Values: Skin designation

BENZENE (CAS 71-43-2)	Can be absorbed through the skin.
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US NIOSH Pocket Guide to Chemical Hazards: Skin designation

BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)	Can be absorbed through the skin.
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US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)	Can be absorbed through the skin.
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Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

The following are recommendations for Personnel Protective Equipment (PPE). The employer/user of this product must perform a Hazard Assessment of the workplace according to OSHA regulations 29 CFR 1910.132 to determine the appropriate PPE for use while performing any task involving potential exposure to this product.

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear suitable protective clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form	Liquid.
Color	LIGHT YELLOW
Odor	MILD CHARACTERISTIC
Odor threshold	Not available.
pH	9.2
Melting point/freezing point	Not available.
Initial boiling point and boiling range	212.04 °F (100.02 °C) estimated
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	8.85 lbs/gal 1.06 g/ml
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	59.31 % estimated
Specific gravity	1.06
VOC	0.16 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects

Acute toxicity Not known.

Components	Species	Test Results
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BENZENE (CAS 71-43-2)

Acute**Oral**

LD50	Rat	3306 mg/kg
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BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)

Acute**Oral**

LD50	Rat	1400 mg/kg
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BENZENE, ETHYL- (CAS 100-41-4)

Acute**Oral**

LD50	Rat	3500 mg/kg
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BENZENE, METHYL- (CAS 108-88-3)

Acute**Oral**

LD50	Rat	2.6 g/kg
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Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization**Respiratory sensitization**

Not a respiratory sensitizer.

Skin sensitization

This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

BENZENE (CAS 71-43-2)	1 Carcinogenic to humans.
BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)	2B Possibly carcinogenic to humans.
BENZENE, ETHYL- (CAS 100-41-4)	2B Possibly carcinogenic to humans.
BENZENE, METHYL- (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

BENZENE (CAS 71-43-2)	Cancer
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US. National Toxicology Program (NTP) Report on Carcinogens

BENZENE (CAS 71-43-2)	Known To Be Human Carcinogen.
BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)	Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity

May damage fertility or the unborn child.

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

Chronic effects

Prolonged inhalation may be harmful.

12. Ecological information**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
BENZENE (CAS 71-43-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	8.76 - 15.6 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	7.2 - 11.7 mg/l, 96 hours
BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)			
Aquatic			
Crustacea	EC50	Brine shrimp (Artemia sp.)	3.55 - 11.29 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.7 mg/l, 96 hours
BENZENE, ETHYL- (CAS 100-41-4)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1.37 - 4.4 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	7.5 - 11 mg/l, 96 hours
BENZENE, METHYL- (CAS 108-88-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8.11 mg/l, 96 hours
SULFONIC ACIDS, C14-16-ALKANE HYDROXY AND C14-16-ALKENE, SODIUM SALTS (CAS 68439-57-6)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	4.14 - 4.95 mg/l, 48 hours

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

BENZENE	2.13
BENZENE, (1-METHYLETHYL)-	3.66
BENZENE, ETHYL-	3.15
BENZENE, METHYL-	2.73

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

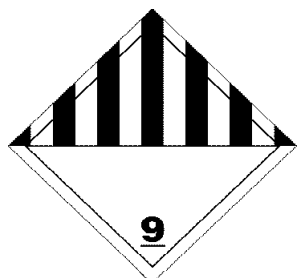
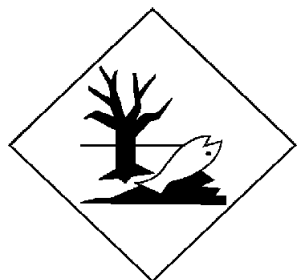
DOT

Not regulated as dangerous goods.

Transportation information on packaging may be different from that listed.

IMDG

UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SULFONIC ACIDS, C14-16-ALKANE HYDROXY AND C14-16-ALKENE, SODIUM SALTS, 1-DODECANAMINE, N,N-DIMETHYL-, N-OXIDE), MARINE POLLUTANT

Transport hazard class(es)**Class** 9**Subsidiary risk** -**Packing group** III**Environmental hazards****Marine pollutant** Yes**EmS** F-A, S-F**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**IMDG****Marine pollutant****General information**

IMDG Regulated Marine Pollutant.

15. Regulatory information**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

BENZENE (CAS 71-43-2) Listed.

BENZENE, (1-METHYLETHYL)- (CAS 98-82-8) Listed.

BENZENE, ETHYL- (CAS 100-41-4) Listed.

BENZENE, METHYL- (CAS 108-88-3) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

BENZENE (CAS 71-43-2)

- Cancer
- Central nervous system
- Blood
- Aspiration
- Skin
- Eye
- respiratory tract irritation
- Flammability

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories	Serious eye damage or eye irritation Reproductive toxicity
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SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

BENZENE (CAS 71-43-2)
 BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)
 BENZENE, ETHYL- (CAS 100-41-4)
 BENZENE, METHYL- (CAS 108-88-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

BENZENE, METHYL- (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

BENZENE, METHYL- (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number

BENZENE, METHYL- (CAS 108-88-3) 594

US state regulations

California Proposition 65



WARNING: This product can expose you to chemicals including BENZENE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

BENZENE (CAS 71-43-2)	Listed: February 27, 1987
BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)	Listed: April 6, 2010
BENZENE, ETHYL- (CAS 100-41-4)	Listed: June 11, 2004

California Proposition 65 - CRT: Listed date/Developmental toxin

BENZENE (CAS 71-43-2)	Listed: December 26, 1997
BENZENE, METHYL- (CAS 108-88-3)	Listed: January 1, 1991

California Proposition 65 - CRT: Listed date/Male reproductive toxin

BENZENE (CAS 71-43-2)	Listed: December 26, 1997
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US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

BENZENE (CAS 71-43-2)
 BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)
 BENZENE, ETHYL- (CAS 100-41-4)
 BENZENE, METHYL- (CAS 108-88-3)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Toxic Chemical Substances (TCS)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	08-09-2019
Version #	01
HMIS® ratings	Health: 2* Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 0 Flammability: 0 Instability: 0
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